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ABSTRACT

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HOW PERSUASIVE WRITING AIDS CRITICAL THINKING

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ABSTRACT

Even though the importance of critical thinking skills has been recognized and studied by experts in several fields, the research has not yielded a clear definition. Nor has a clear explanation been proffered of how writing can foster critical thinking. This article reviews the literature on the various definitions of critical thinking and examines how critical thinking can be promoted through writing. Persuasive writing can especially help the acquisition of critical thinking skills because (1) that genre calls upon several of the same higher-level thinking skills as critical thinking; (2) it forces one to think in concepts because the organizational structure requires one to connect ideas through a hierarchy of thesis statements and topic sentences; and (3) it teaches writers to create their own alternatives to problems instead of merely analyzing those of others.

HOW PERSUASIVE WRITING AIDS CRITICAL THINKING

Some recent research has suggested that analytic or persuasive writing helps develop critical reasoning skills (Durst, 1987; Pringle and Freedman, 1985). To write persuasively, one must make a generalization and support it with details. This requires formulating reasons, analyzing their constituent parts, and synthesizing them by combining or fusing, often into fresh arrangements or amalgams, to mark the pattern as well as the product of the writer's thoughts (Behling, 1978). The connection between critical thinking and persuasive writing is based on the fact that the skills needed for persuasive writing are a subset of those involved in critical thinking (Beyer, 1985; Ennis, 1962; Facione, 1990; Nickerson, 1986a,b).

However, the literature is not specific as to *how* persuasive writing promotes critical thinking. This paper reviews the literature about critical thinking and persuasive writing, and suggests how they might interact.

Why Persuasive Writing Is So Difficult

Two stumbling blocks

The rhetorical shape of the written persuasive essay offers two potential stumbling blocks for the novice:

First, rhetorically, it is a highly organized and abstracted form of organization (Moffett, 1968), which requires synthesis and hierarchical thinking (Freedman and Pringle, 1984). Not only must writers formulate arguments and back them up with appropriate data, but they must find a unifying thesis that ties all the material together. Whereas narrative relies more upon the formulation of ideas through chronology or sequencing, persuasive writing requires making claims, challenging them, backing them up by producing reasons, criticizing those reasons and rebutting them (Toulmin, Rieke, and Janik, 1979). Younger

children and students with less developed cognitive abilities will most certainly experience more difficulty with this genre since it requires a high level of concept formation.

True concept formation occurs when a writer is cognitively mature enough to understand the objective bonds that connect similar objects. The next step is to be able to analyze that connection to find the similarities between the two common elements, which are abstract. Finally, the writer must be able to apply the concept to other abstract formulations (Freedman and Pringle, 1984).

Freedman and Pringle related these ideas to finding a unifying thesis and organizational pattern when writing a persuasive essay (comments in brackets are mine):

(a) generate a series of separate points all relating to the central topic [i.e., brainstorm];

(b) group together those that are alike, a task which requires perceiving an abstract bond [i.e., generate a topic sentence that governs a paragraph];

(c) formulate that commonality in language;

(d) interrelate that formulation with other such abstract formulations [generate a thesis that governs the entire composition] (Freedman and Pringle, 1984, pp. 79-80).

So it is the actual rhetorical shape of a persuasive essay that places an additional cognitive burden on the writer to refine and relate abstract concepts.

The second potential stumbling block for the novice is the perennial struggle of correctly anticipating what the audience knows. But in the case of the persuasive essay, it is a special problem since writers need to consider what objections the opposing party will have to arguments so appropriate counterarguments can be formulated and incorporated into the

text. Because this is such a new and arduous task for young and novice writers, the usual result is extremely short persuasive pieces, and almost always shorter than a narrative produced under similar conditions (Crowhurst, 1980, 1986, 1987; Freedman and Pringle, 1984; Hidi and Hildyard, 1981; Pringle and Freedman, 1985). The essay may contain one, perhaps two, supporting details pertaining to the topic. When asked to produce more orally, students can provide more details handily. However, in writing, they tend to stop after what they seem to identify would be the first conversational turn, thus conforming to the rules of spoken discourse (Freedman and Pringle, 1984).

Conforming to the rules of spoken discourse is a strategy that novice writers rely on when writing (Bereiter and Scardamalia, 1982; Crowhurst, 1983; White, 1989; Wilkinson, Barnsley, Hanna, and Swan, 1980). That is, they tend to copy what they hear as a sort of transition strategy until a schema for the organization pattern of a particular written genre is acquired. This strategy works very well when writing narratives for two reasons. First, oral models of narrative are plentiful, and writers, therefore, have many examples to help them internalize the organizational structure. The second reason for the success of this strategy is that the written narrative is very similar in structure to its oral counterpart. There is no need to drastically alter the structure of an oral narrative for a reading audience.

However, this strategy for mapping the oral form onto the written one fails with persuasive writing because written persuasion not only requires an organizational structure quite different from oral persuasion, but it means arguments must be recognized and developed without the help of a sparring partner. In an oral argument, ideas are developed by participants taking turns presenting and supporting arguments. Freedman and Pringle

(1984) describe it as a tennis match where "...each shot is parried by one's partner, and each shot may change the direction of the argument so that the end may be played on very different territory" (p. 79). Consequently, writers must learn a new way of developing arguments without the help of an interlocutor.

To sum up the difficulties inherent in persuasive writing, then, novices may be hindered by underdeveloped cognitive abilities, faced with a more challenging rhetorical schema, and be unable to anticipate an audience's objections so counterarguments can be incorporated into the text.

Next we will consider the nature of critical thinking and its relation to persuasive writing.

Critical Thinking - What Is It?

The importance of critical thinking skills has been recognized and studied by experts in several fields. Even so, this research has not yielded a clear definition of what critical thinking is. "Defining thinking skills, reasoning, critical thought, and problem solving is troublesome to both social scientists and practitioners. Troublesome is a polite word; the area is a conceptual swamp" (Cuban, 1984). Among others who have more recently struggled with the definition are Ennis (1985, 1989, 1991), Ennis, Millman, and Tomko (1983), Feeley (1976), Lipman (1988), Parker, Wendling, and Mueller (1988), Reboy (1989), Sternberg (1985), and Tierney, Soter, O'Flahavan and McGinley (1989). Critical thinking has been confused with other kinds of thinking, such as associative thinking, concept formation, problem solving, and creative thinking (Ennis, 1962). Critical thinking has also been called reasoning (Glasman, Koff, and Spiers, 1984; Grant, 1988; Shulman, and Carey, 1984),

higher order thinking (Doyle, 1983; Sykes, 1985), intelligent behavior (Costa, 1984), and thinking (Arendt, 1977).

In the continuing effort to define critical thinking, Beyer's (1985) list of nine skills, derived from among others Dressel and Mayhew (1954), Ennis (1962), Fair (1977), Fraser and West (1961), Hudgins (1977), Morse and McCune (1971), and Watson and Glaser (1980), lists these activities in critical thinking:

(1) Distinguishing between verifiable facts and value claims.

(2) Determining the reliability of a source.

(3) Determining the factual accuracy of a statement.

(4) Distinguishing relevant from irrelevant information, claims or reasons.

(5) Detecting bias.

(6) Identifying ambiguous or equivocal claims or arguments.

(7) Recognizing logical inconsistencies of fallacies in a line of reasoning.

(8) Distinguishing between warranted or unwarranted claims.

(9) Determining the strength of an argument.

Even more recently, a body of scholars drawn from a variety of academic disciplines worked for two years to achieve a consensus definition of critical thinking. Known as "The Delphi Project" (Facione, 1990), their work generated 15 recommendations on critical thinking instruction and assessment, a list of core skills and subskills, as well as a list of those dispositions crucial to becoming a good critical thinker.

Following is a list of the critical thinking cognitive skills and sub-skills outlined in The Delphi Report:

SKILL	*SUB-SKILL*
(1) interpretation	categorization decoding significance clarifying meaning
(2) analysis	examining ideas identifying arguments analyzing arguments
(3) evaluation	assessing claims assessing arguments
(4) inference	querying evidence conjecturing alternatives drawing conclusions
(5) explanation	stating results justifying procedures presenting arguments
(6) self-regulation	self-examination self-correction

(Facione, 1990, p.6).

While Beyer's (1985) listing of critical thinking skills is not refuted by The Delphi participants' consensus, his list is really subsumed under the Delphi's notions of "identifying" and "analyzing" all aspects of arguments whether self- or other-generated. The Delphi group has expanded Beyer's (1985) list of skills to include the more active component of "interpretation," "inference," and "explanation" as well as the metacognitive skill of "self-regulation," where one is asked to monitor one's own possible bias towards an issue. Certainly the trend is to regard critical thinking as a much more comprehensive skill than before.

How Writing Helps Learning Through Dialectics

Before getting to the heart of this paper -- how persuasive writing aids critical thinking

-- the notion of how writing helps learning in general needs to be discussed. Many researchers have conceived the process of writing-to-learn as a dialectical process. Dialectics is a process that uses a thesis and its antithesis to create a synthesis of the two ideas. Basseches (1989) stated that dialectical thinking uses those relationships to go beyond the fundamental elements to describe the *process* of change. Writing can then be viewed as a dialectical operation that *creates* the opportunity to determine the thesis and antithesis so that one can arrive at a synthesis of the two.

With dialectics, one can go beyond the given information to reach conclusions that would not have been possible within the existing structure of formal operations. In Basseches' (1989) words, "Dialectical analyses draw attention to the limits of the contexts in which formal analyses are applicable" (p. 35). He contrasted dialectical thinking with the Piagetian model:

> Whereas formal operations and concrete operations describe how thought is structured and made to move within a closed system, dialectical schemata describe how thought frees itself to transcend closed systems and thereby to create and comprehend change of a greater scope in itself and in the world (p. 37).

It is often said that writing is a reflection of one's thinking. Any writer quickly learns that ideas will never appear logical on paper if they are not logical in one's head. This has led educators to espouse the teaching of logic, informal logic, problem solving, critical thinking, reasoning, etc. (Beyer, 1985; McCormick, 1983; Schwalm, 1985). Although instruction in logic may help students to perform problems in logic better, it is unclear how much this helps a student to write better.

It seems that clear writing, then, is not necessarily a direct result of logical thinking. This assumes that writing is a linear process. It is, however, a much more iterative process

and useful as a heuristic device for thinking because it can facilitate the development of ideas. Thus, "the solution is not to teach clear thinking apart from the writing process, but rather to use the writing process as a means of developing the cognitive skills required in a particular discipline" (Farkas, 1980).

How exactly does writing foster thinking? First, in a physical sense, the written record puts our thoughts into a two-dimensional, linear form. So, in this way, we write to learn what we know since this form helps us to see inconsistencies in logic and amend them.

Second, on a cognitive level, thinking and writing interact dialectically. Scardamalia and Bereiter (1985) used the notion of dialectics to explain how the concept of writing-to-learn may work. Each writer has two problem "spaces": Within the substantive space are worked out problems that deal with the beliefs and knowledge of the writer; the rhetorical space is where problems are dealt with that relate to the structure of the composition itself. The dialectical process arises when the two spaces interact. To show how this theory works, Scardamalia and Bereiter (1985) offered the example of the student asked to write an essay on capital punishment. If not much is known about the topic, a lot of effort will be spent in the substantive space acquiring facts, determining one's own beliefs on the topic, sorting out emotional reactions, and relating these beliefs to other values one might have. However, once these problems have been resolved in the substantive space, it is subjected to rhetorical constraints, which involve convincing the reader of the validity of one's position or merely asking the reader to explore the difficulties and perplexities of the issue. The substantive components of the composition, i.e., beliefs, values, emotional reactions, and facts, are then appropriately amended to meet the demands of the rhetorical constraints.

Emig (1977) stated that it is the very process of putting words on paper that clarifies thinking. This clarification comes about because writing encourages the integration of ideas, requires the establishment of relationships, provides immediate and tangible feedback, and promotes personal involvement with the material. Not only does the act of writing foster the integration of ideas but actually "forces" (Emig's term) writers to make new relationships between previously unrelated pieces of information, thereby helping them come to know more than they did before about a subject (van Nostrand, 1979). This writing-to-learn process describes the very essence of dialectical thinking.

Rivers (1987) used this same analogy to explain how writers learn from writing.

> ...Writers can also *write* more than they realize, and in this way, through the mediation of writing, they can arrive at new knowledge. That is, writers are, in fact, *instructed by their own words*. They do not know and then write -- they write and then come to know. Furthermore, without the special mediation of thought available through writing, writers are not able to arrive at this new knowledge (Rivers, 1987, p. 99).

Writing is, then, the externalization of this internal process, which helps writers to further examine their thoughts. The process of writing is a dynamic one, with constant movement between product and process. This internalization and externalization are very important to the process. Rivers says: "Writing is *not* merely absorbing ready-made structures from a discourse. Further, it is *not* simple production. It is rather an action in the external world which helps an individual to create an internal plane" (1987, p. 100).

The Special Contribution of Persuasive Writing to Critical Thinking

As stated previously, persuasive writing places special demands on a writer because of the need to analyze, evaluate, and synthesize arguments (Bloom, Englehard, Furst, Hill, Kratwohl, 1956) as well as anticipate and answer potential objections from the audience. In

doing so, the resultant product is, of necessity, a set of arguments and support that are not merely a regurgitation of others' but rather solutions and alternatives to problems that are novel and unique to the writer's situation. If I want to convince my mother that she should give me $1,000, I must concoct an essay that considers her objections in my reasons. These would be reasons and counterarguments that are specific to this situation and thus not based on any template or previously read essay. Each argument and set of supporting data must be original, tailored especially for the writer's audience and point of view. And when there is no pattern to follow, writers are left no choice but to think for themselves.

Summary

The aim of the critical thinking movement is to develop higher order thinking skills in students. This goal can be facilitated by writing in general because (1) writing allows one to review and revise previous thoughts and, (2) through a dialectical process, writing forces the knowledge and rhetorical spheres to interact, which, in turn, encourages the integration of ideas leading to the development of new relationships between and among them. Critical thinking is facilitated specifically through persuasive writing because this genre requires the additional skills of formulating reasons, analyzing, and finally synthesizing them into new ideas and conclusions.

BIBLIOGRAPHY

Arendt, H. (1977). Reflections: Thinking (II). T*he New Yorker*, November 28, 114-164.

Basseches, M. (1989). Intellectual development: The development of dialectical thinking (pp. 23-45). In E. Maimon, B. Nodine, and F. O'Connor (Eds.), *Thinking, reasoning, and writing*. White Plains, NY: Longman Inc.

Behling, C. (1978). *Cognitive decentering in young adults*. Unpublished doctoral dissertation, University of New Mexico.

Bereiter, C. and Scardamalia, M. (1982). From conversation to composition: The role of instruction in a developmental process. In R. Glaser (Ed.), *Advances in instructional psychology (Vol. 2)*. Hillsdale, N.J.: Erlbaum.

Beyer, B. (1985). Critical thinking: What is it? *Social Education, April*, 270-276.

Bloom, B., Englehart, M., First, E., Hill, W., and Krathwohl, D. (1956). *Taxonomy of educational objectives. The classification of education goals: Handbook I: Cognitive domain.* New York: David McKay.

Costa, A.L. (1984). Thinking: How do we know students are getting better at it? *Roeper Review, 6*, 197-198.

Crowhurst, M. (1980). Syntactic complexity in narration and argument at three grade levels. *Canadian Journal of Education, 5*, 6-13.

Crowhurst, M. (1983). *Persuasive writing at grades, 5, 7, and 11: A cognitive-developmental perspective.* Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada. ERIC Document Reproduction Service No. ED 230 009)

Crowhurst, M. (1986). Revision strategies of students at three grade levels. *English Quarterly, 19*(3), 217-226.

Crowhurst, M. (1987). Cohesion in argument and narration at three grade levels. *Research in the Teaching of English, 21*, 185-201.

Crowhurst, M. (1991). Interrelationships between reading and writing persuasive discourse. *Research in the Teaching of English (25)3*, pp. 314-338.

Cuban, L. (1984). Policy and research dilemmas in the teaching of reasoning: Unplanned designs. *Review of Educational Research, 54(4)*, 655-681.

Doyle, W. (1983). Academic work. *Review of Educational Research, 53*, 159-199.

Dressel, P. & Mayhew, L. (1954). *Critical thinking in social science: A handbook for evaluation and teaching*. Dubuque, IA: William Brown Co.

Durst, R. (1987). Cognitive and linguistic demands of analytic writing. *Research in the Teaching of English, 21*(4), 347-76.

Emig, J. (1977). Writing as a mode of learning. *College Composition and Communication, 28*, 122-128.

Ennis, R. (1962). A concept of critical thinking. *Harvard Educational Review, 32(1)*, 81-111, 1966/1982 with J. Millman & T. Tomko. *Manual for Cornell Critical Thinking Tests Level X and Level Z*. Champaign, Ill.: Illinois Thinking Project.

Ennis, R. (1981). Rational thinking and educational practice. In J.F. Soltis (Ed.), *Philosophy and education*. Chicago: University of Chicago Press.

Ennis, R. (1985). A logical basis for measuring critical thinking skills. *Educational Leadership, 45*, 44-48.

Ennis, R. (1989). Critical thinking and subject specificity: Clarification and needed research. *Educational Researcher, 18*, 4-10.

Ennis, R., and Millman, J., and Tomko, T. (1983). *Manual for two tests: Cornell Critical Thinking Test. Level X and Cornell Critical Thinking Test, Level Z.* Third Education. Champaign, Ill.: Illinois Thinking Project, University of Illinois.

Facione, P. (1990). The Delphi report. *Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction.* Millbrae, Calif.: California Academia Press. (Also available from ERIC Doc. No.: ED 315 423.)

Fair, J. (1977). Skills in thinking. In Joann Kurfman, (Ed). *Developing decision-making skills: 47th yearbook*. Washington: National Council for the Social Studies.

Farkas, P. (1980). Identifying and developing advanced cognitive skills through the composing process. Proceedings from Reasoning, Piaget and Higher Education Conference, Denver, April 10-11 (ERIC 197 644).

Feeley, T., Jr. (1976). Critical thinking: Toward a definition, paradigm and research agenda. *Theory and Research in Social Education, 4*, 1-19.

Fraser, D. & West, E. (1961). *Social studies in secondary schools*. New York: Ronald Press.

Freedman, A., & Pringle, I. (1984). Why students can't write arguments. *English Education, 18*(2), 73-84.

Glasman, N., Koff, R. & Spiers, H. (1984). Preface. *Review of Educational Research, 54,* 461-471.

Grant, G. (1988). *Teaching critical thinking*. Praeger: New York.

Hidi, S. and Hildyard, A. (1981). The comparison of oral and written productions in two discourse types. *Discourse Processes, 6,* 91-105.

Hudgins, B. (1977). *Learning and thinking*. Itasca, IL. F.E. Peacock Publishers.

Lipman, M. (1988). Critical thinking--What can it be? *Educational Leadership, 46,* 38-43.

McCormick, K. (1983). Teaching critical thinking and writing. *The Writing Instructor, Spring*, 137-144.

Moffett, J. (1968). *Teaching the universe of discourse.* Boston: Houghton Mifflin.

Morse, H. & McCune, G. (1971) (Revised by Lester Brown and Ellen Cook). *Selected items for the testing of study skills for critical thinking: Bulletin 15.* Washington, National Council for Social Studies 1940/1971.

Nickerson, R. (1986a). *Reflections on reasoning*. Hillsdale: Erlbaum.

Nickerson, R. (1986b). Reasoning in argument evaluation. (ERIC document ED 279 690).

Parker, W., Wendling, L., and Mueller, M. (1988). Critical thinking and curriculum design in the civic domain. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, Louisiana.

Pringle, I. & Freedman, A. (1985). *A comparative study of writing abilities in two modes at the grade 5, 8, and 12 levels.* Toronto, Ont.: Ministry of Education

Reboy, L. (1989). Teaching critical thinking: Bringing the real world into the classroom. *The Clearing House, 62,* 441-413.

Rivers, W. (1987). *Problems in composition: A Vygotskian perspective*. Unpublished dissertation, University of Delaware.

Schwalm, D. (1985). Teaching argument: Finding a place to start. *The Writing Instructor, Summer*, 175-182.

Shulman, L. & Carey, N. (1984). Psychology and the limitations of individual rationality: Implications for the study of reasoning and civility. *Review of Educational Research, 54,* 501-524.

Sternberg, R. (1985). Critical thinking: Its nature, measurement, and improvement. In F. Link (Ed.), *Essays on the intellect.* Alexandria, Va.: Association for Supervision and Curriculum Development.

Sykes, G. (1985). Teaching higher order cognitive skills in today's classrooms: An exploration of some problems. Testimony presented to the California Commission on the Teaching Profession, Claremont, March.

Tierney, R., Soter, A., O'Flahavan, J., and McGinley, W. (1989). The effects of reading and writing upon thinking critically. *Reading Research Quarterly, 24,* 134ff.

Toulmin, S., Rieke, R., & Janik, A. (1984). *An introduction to reasoning.* (2nd ed.). New York: Macmillan.

van Nostrand, A. (1979). Writing and the generation of knowledge. *Social Education, 43,* 178-180.

Watson, G. & Glaser, E. (1980). *Critical thinking appraisal manual.* New York: Harcourt Brace Jovanovich.

White, J. (1989). Children's argumentative writing: A reappraisal of difficulties. In F. Christie (Ed.), *Writing in schools: Reader (ECT 418)* (pp. 9-23). Geelong, Victoria: Deakin University Press.

Wilkinson, A., Barnsley, G., Hanna, P., and Swan, M. (1980). *Assessing language development.* Oxford: Oxford University Press.